

FIG. 1

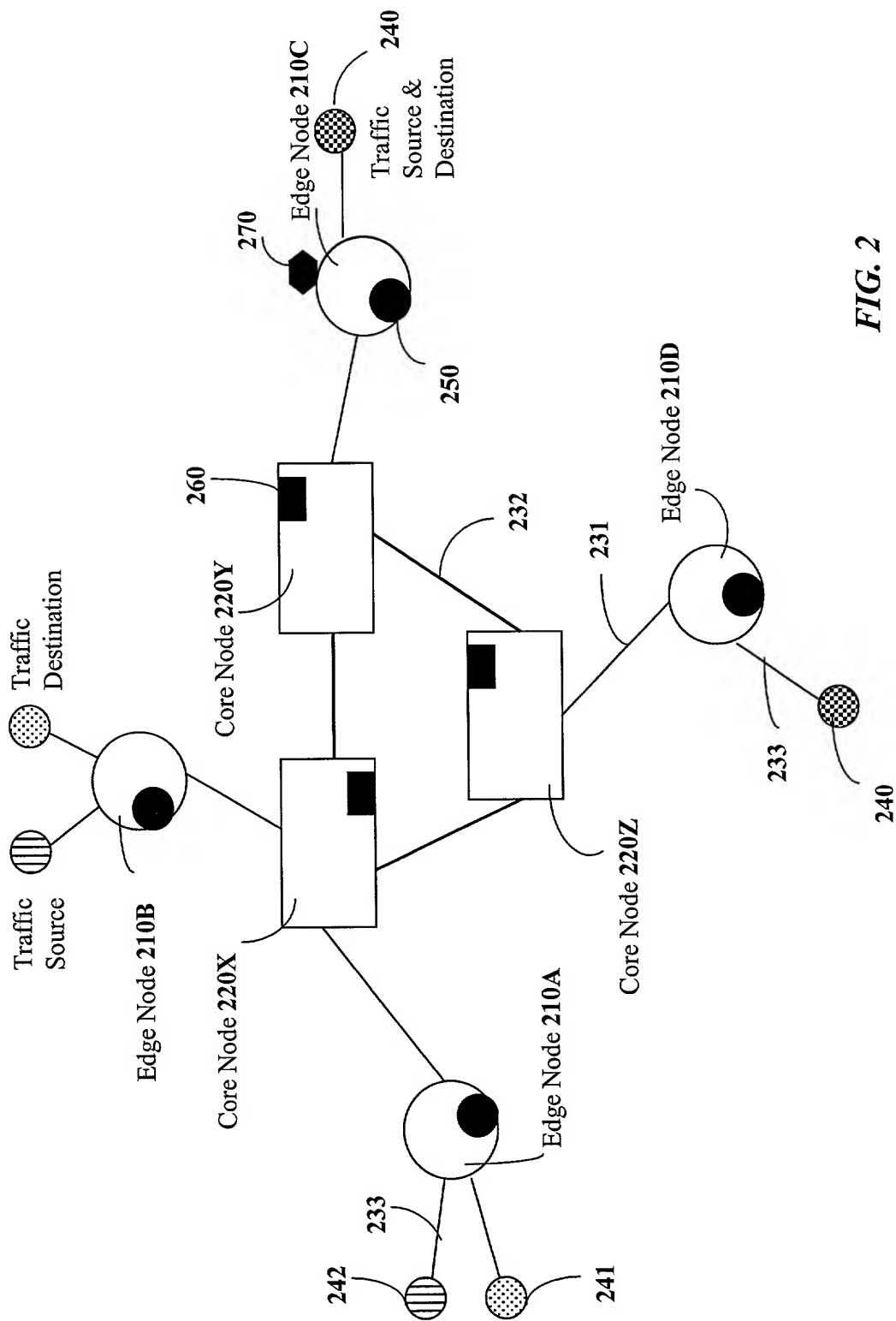


FIG. 2

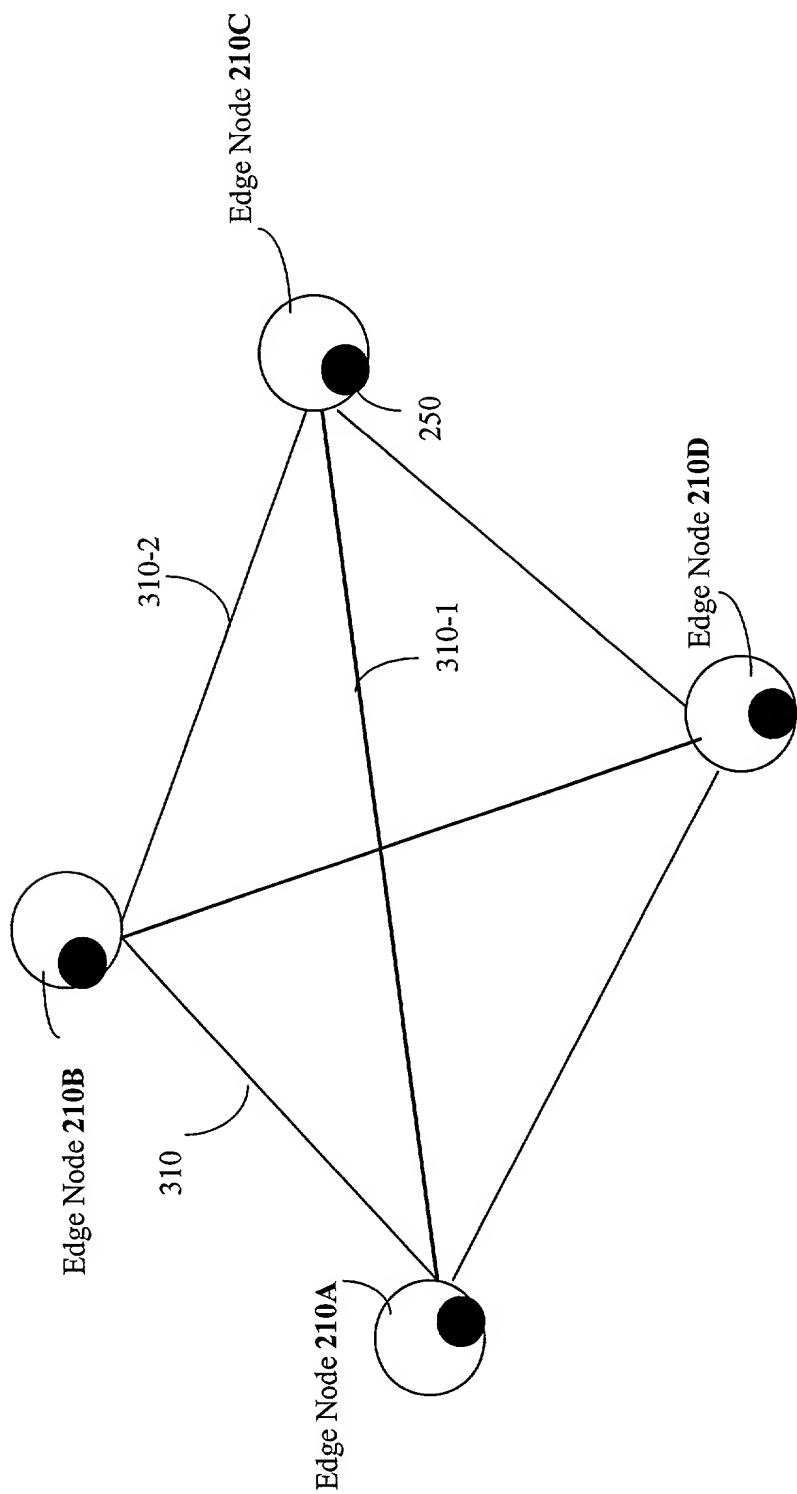
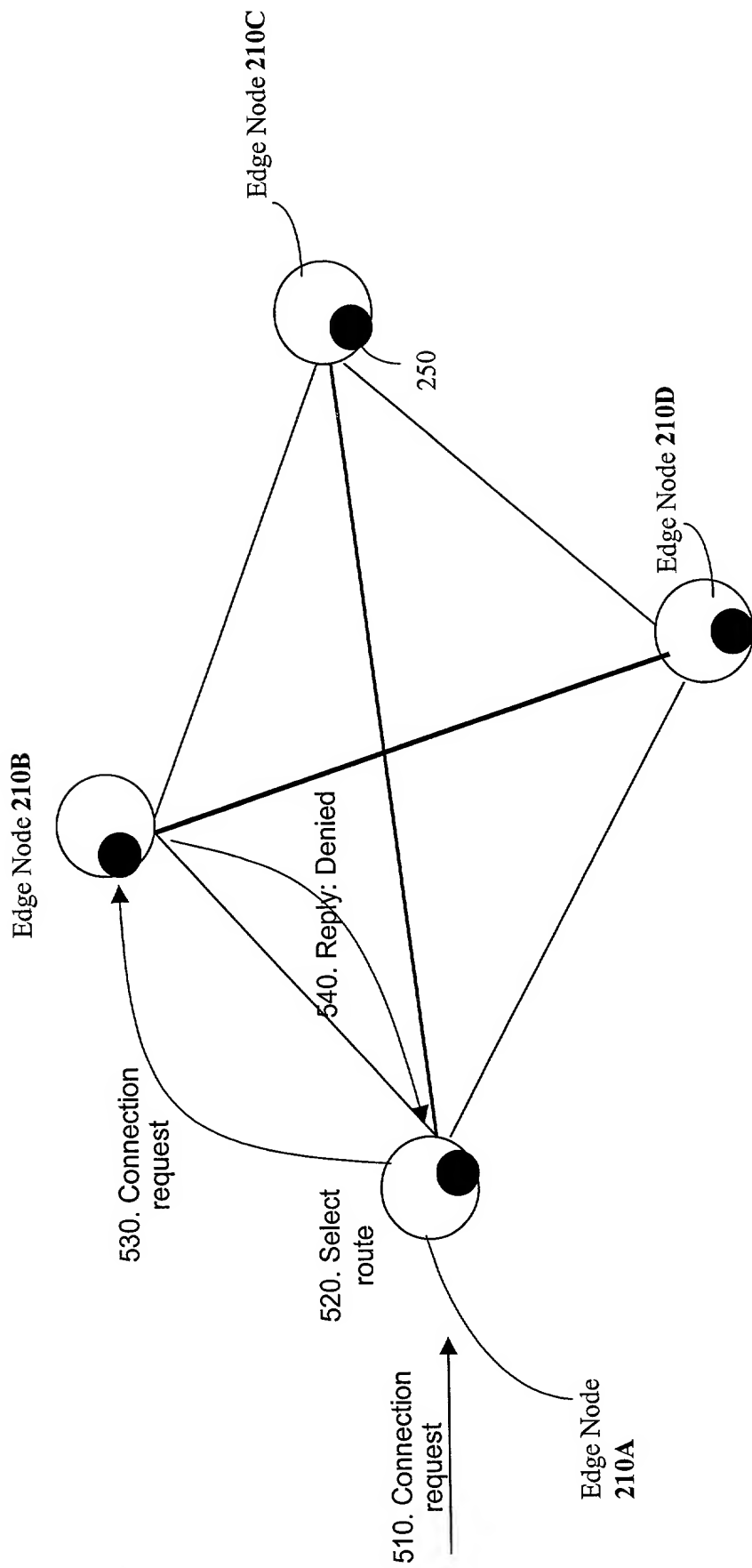


FIG. 3

400	410	420	430	440
Routes	Rank	Availability	Status	
AB	1	1	Primary	
ACB	2	0	Secondary	
ADB	2	1	Secondary	
ACDB	3	0	Secondary	
ADCB	3	1	Secondary	

FIG. 4



PRIOR ART

FIG. 5

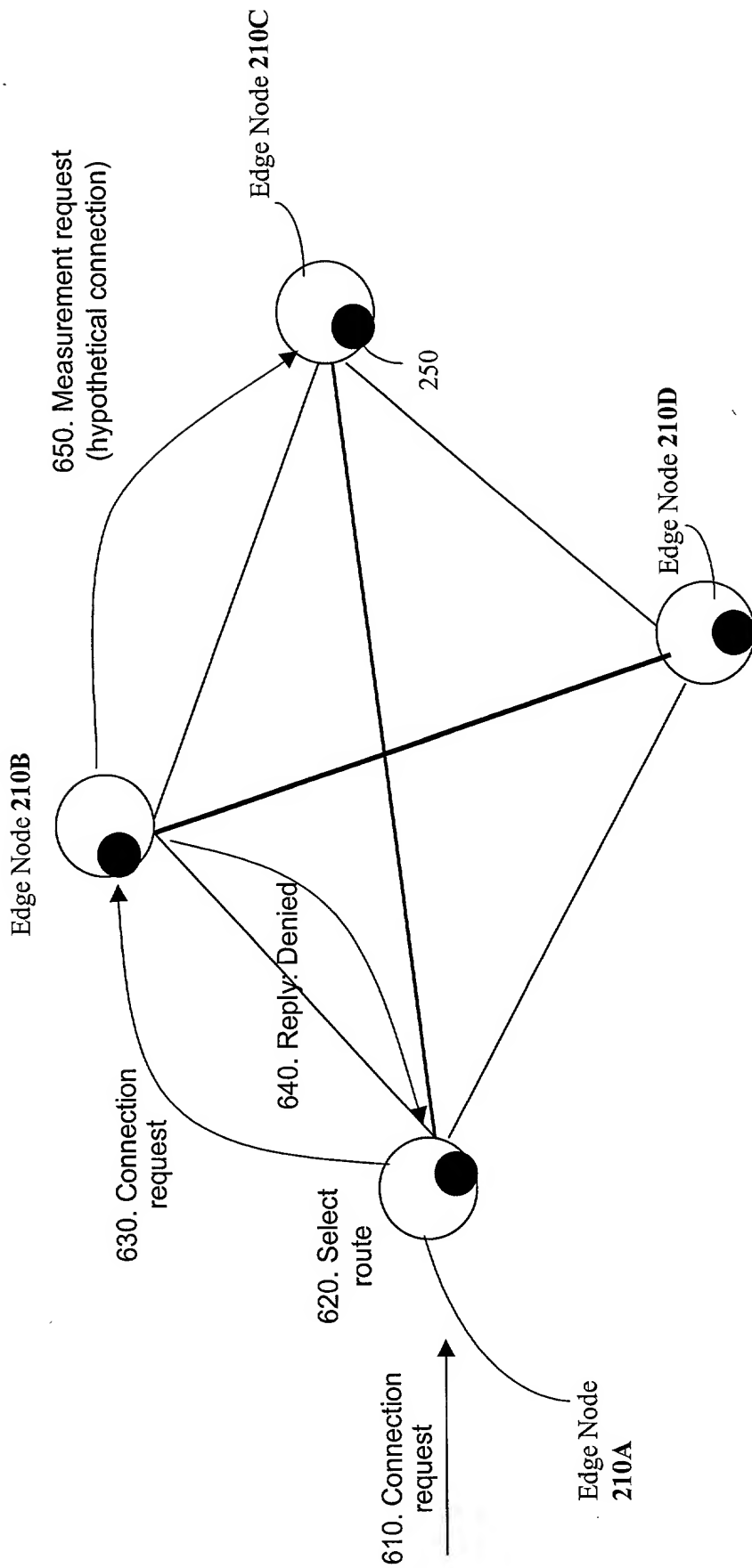


FIG. 6

	Link B-A	Link B-C	Link B-D
Primary Traffic	9	7	3
Secondary Traffic	1	3	7
Denied Traffic	4	3	3

FIG. 7

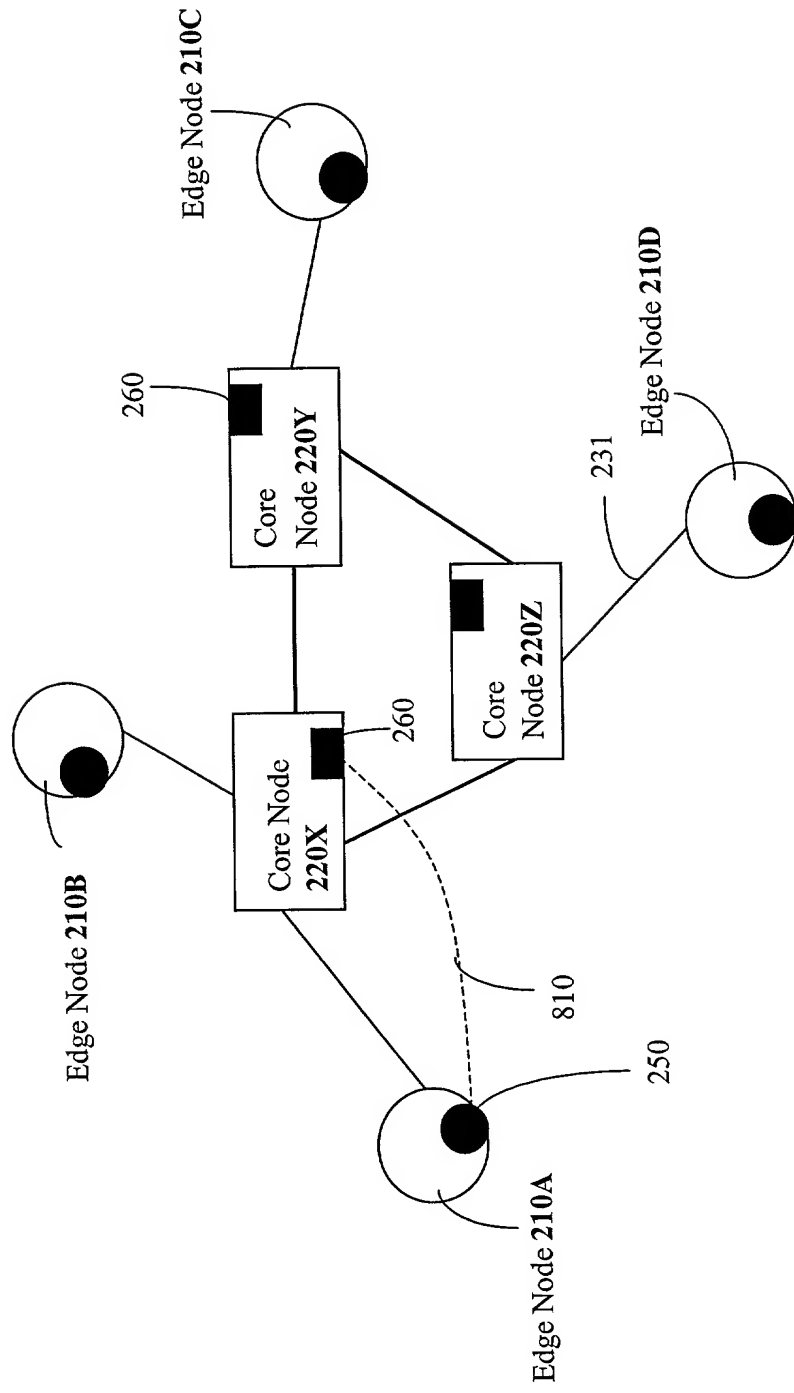


FIG. 8



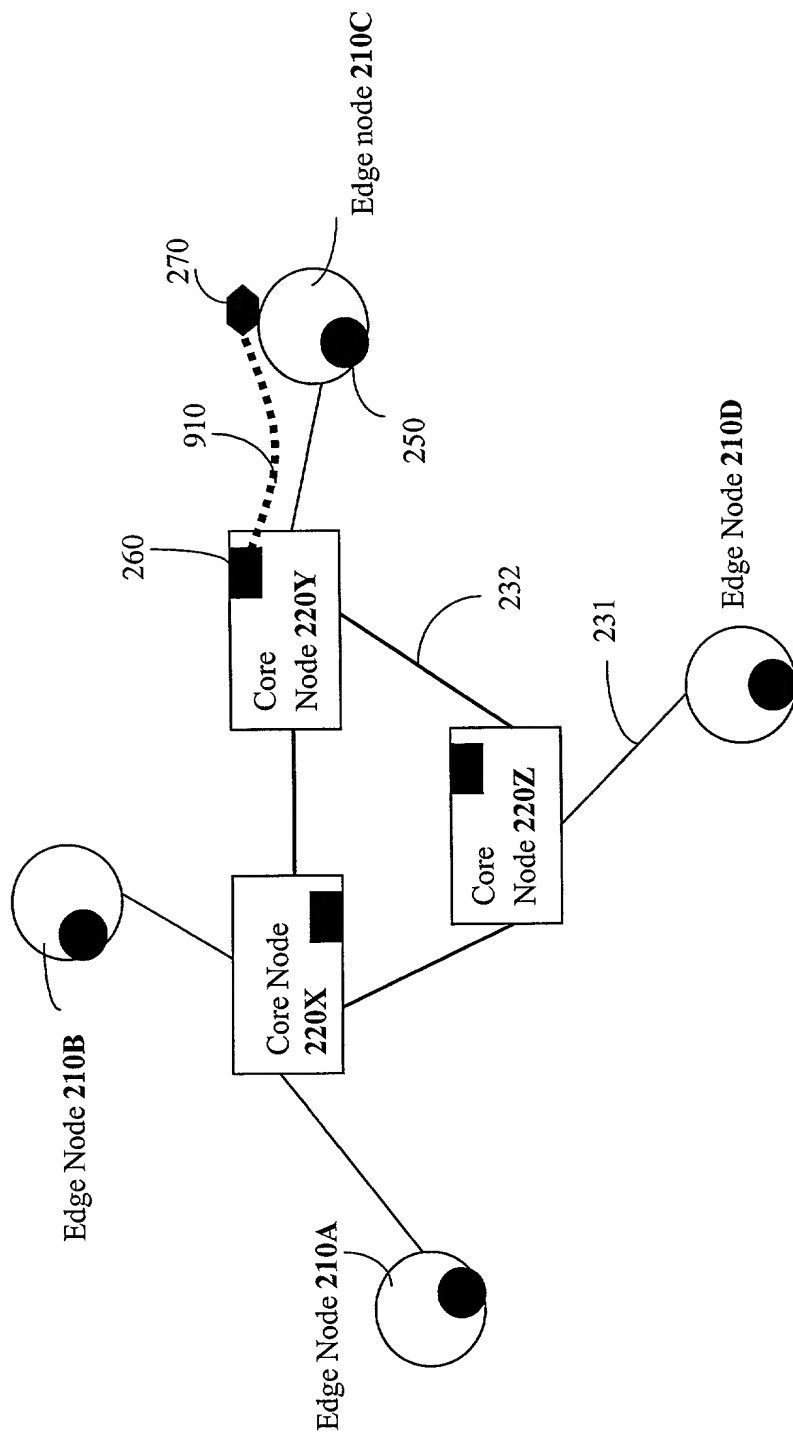
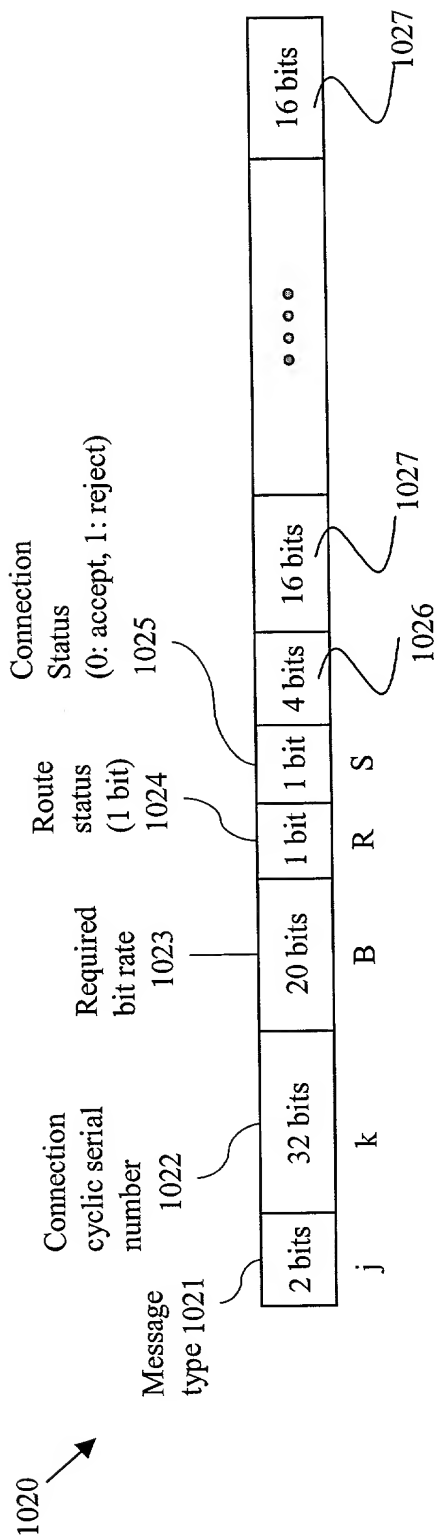
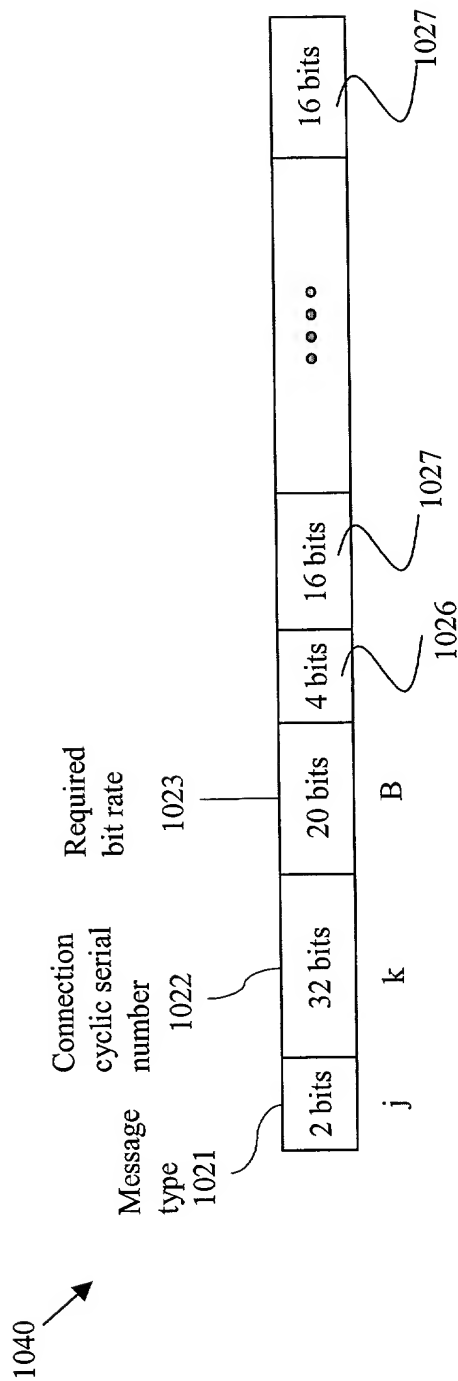


FIG. 9



**FIG. 10A**



**FIG. 10B**

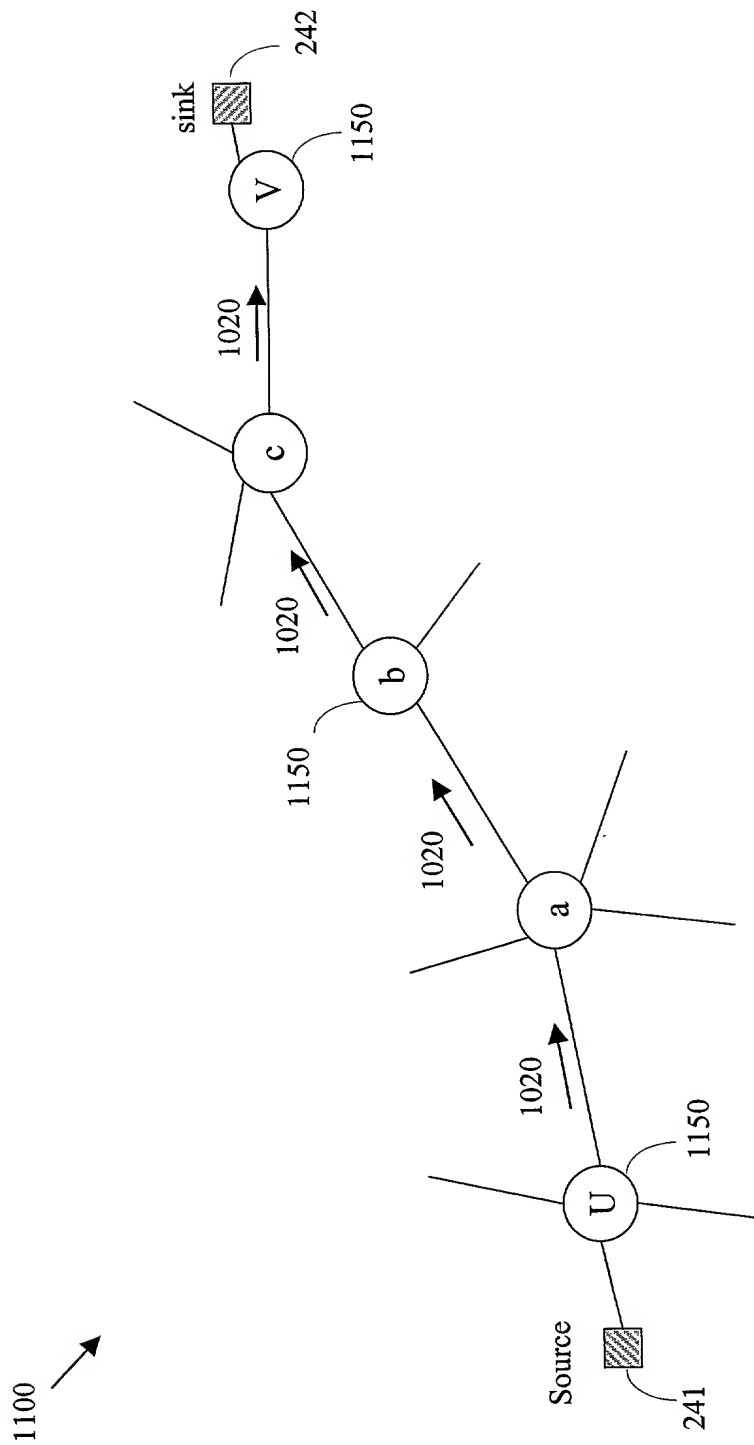


FIG. 11

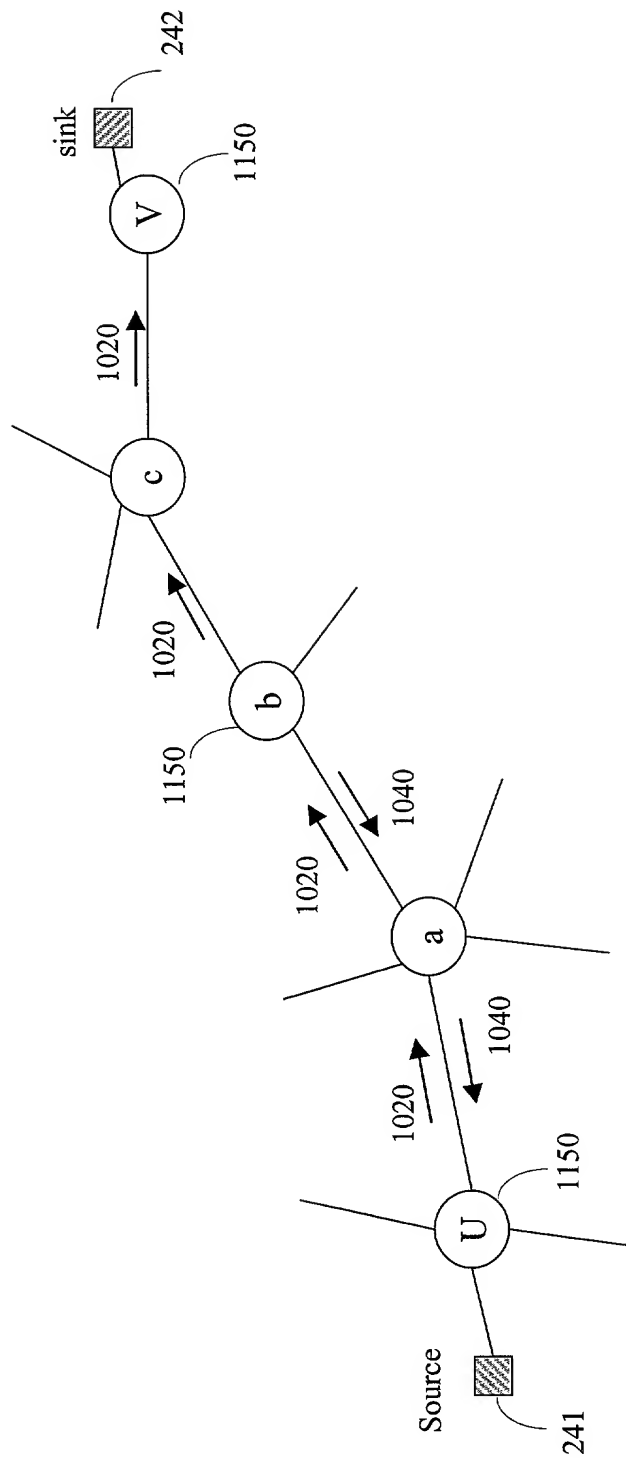


FIG. 12

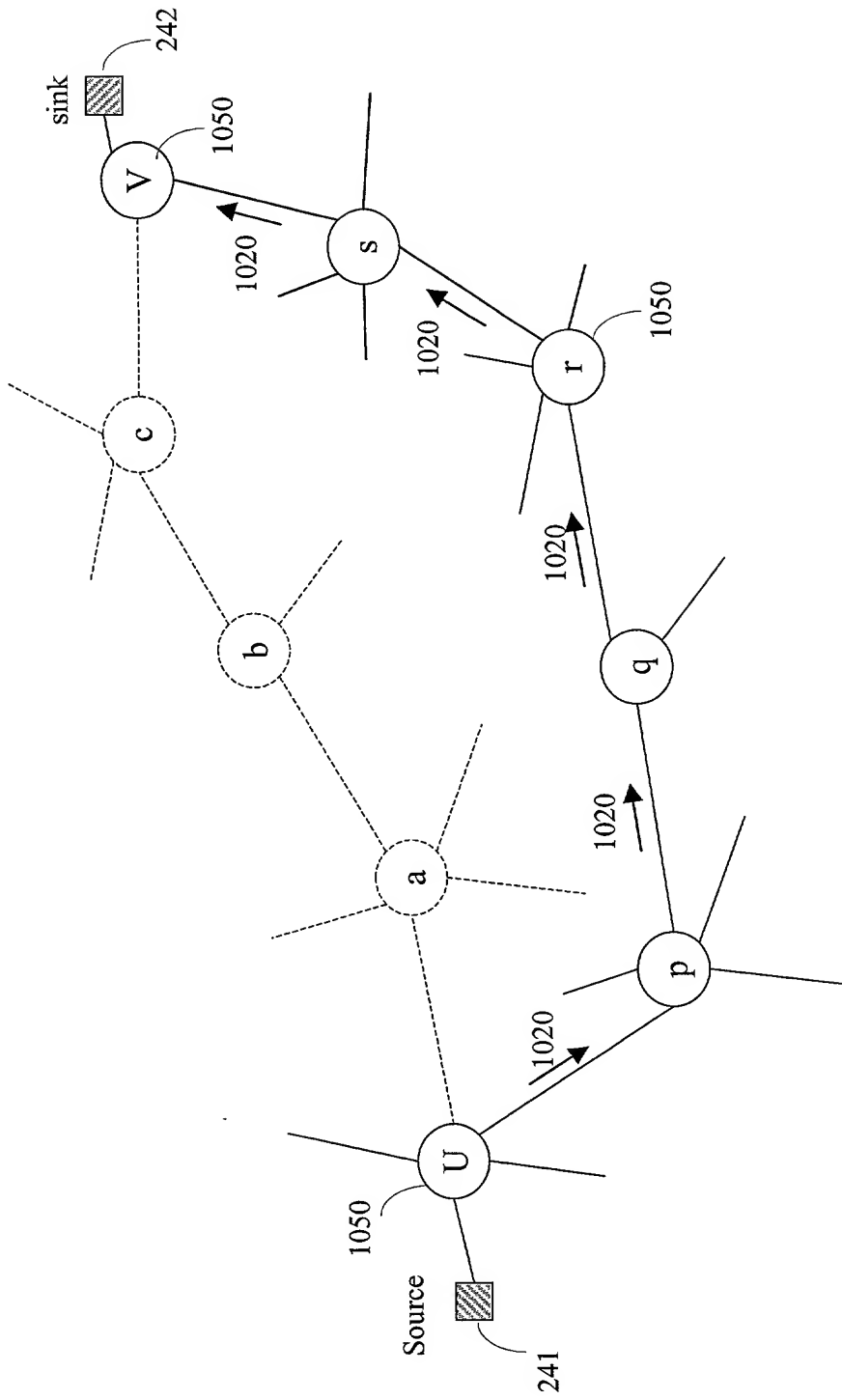


FIG. 13

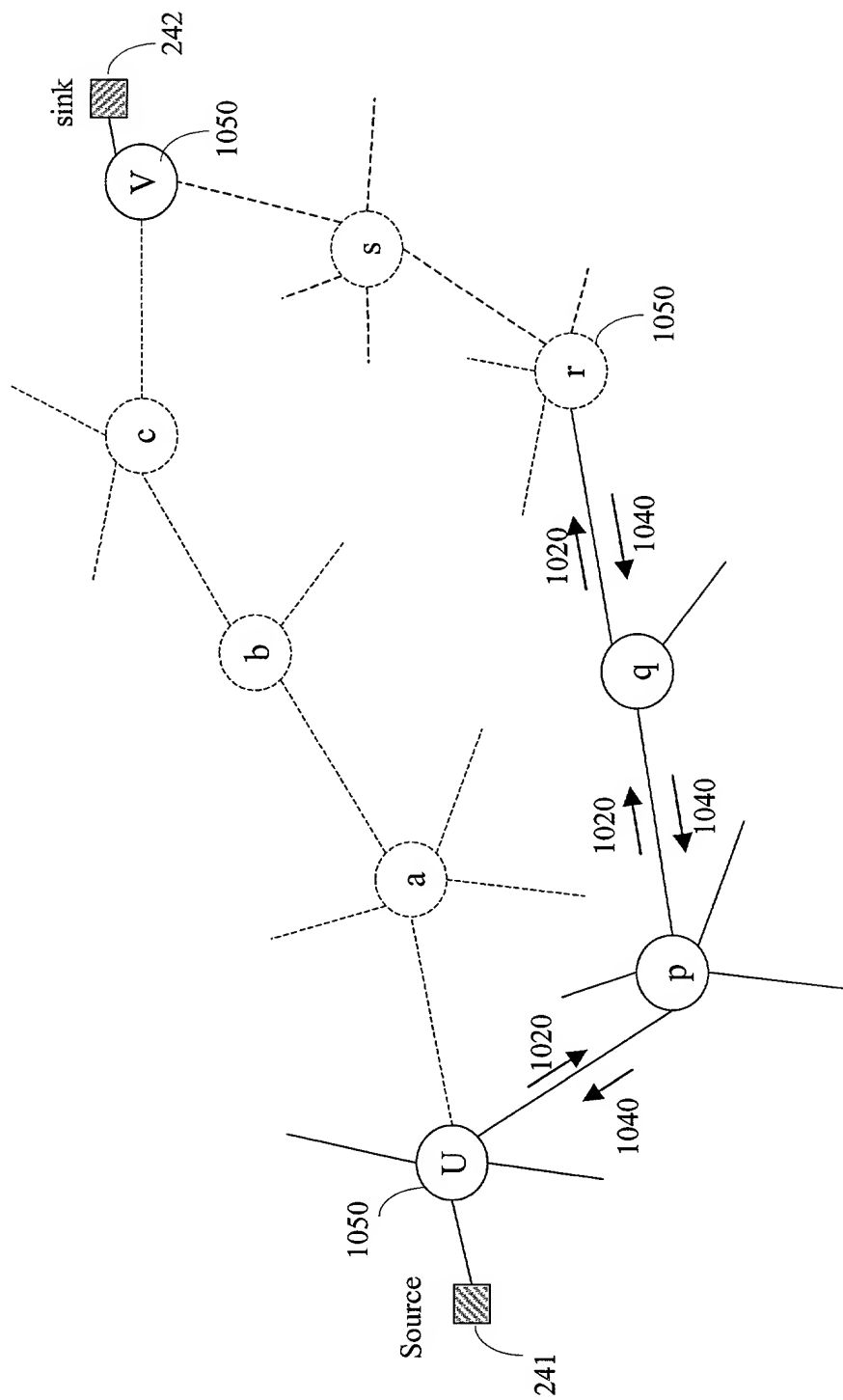


FIG. 14



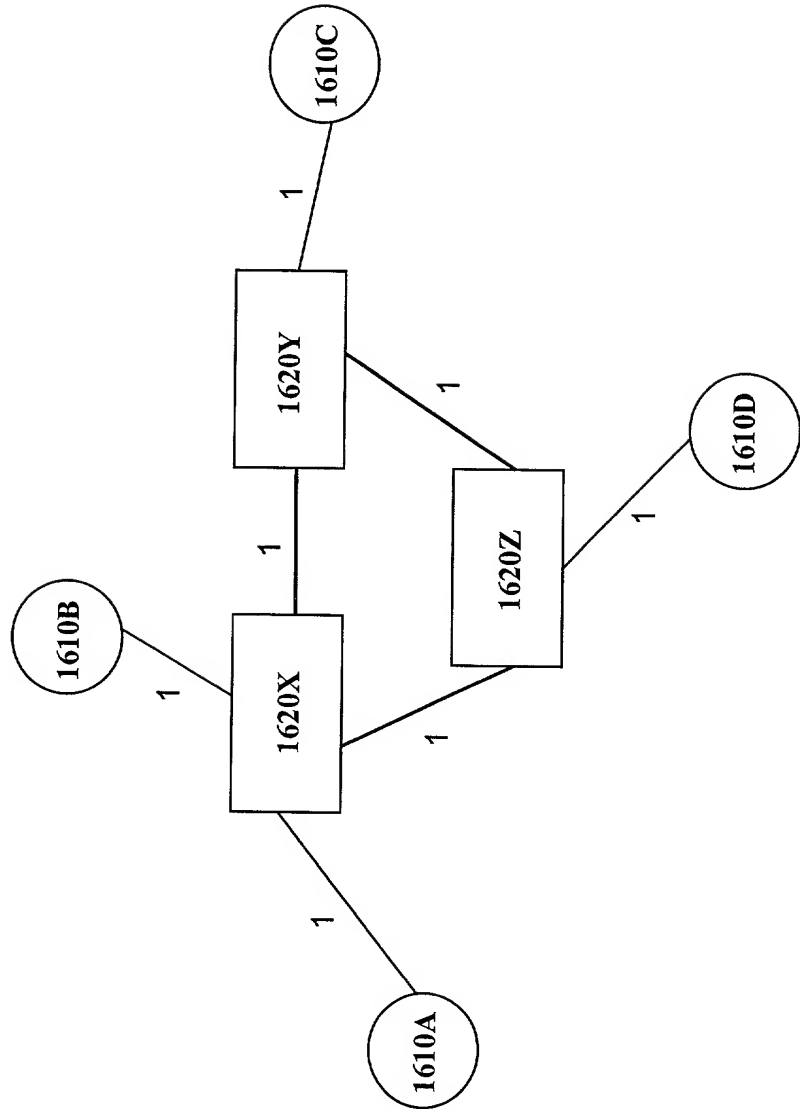


FIG. 16



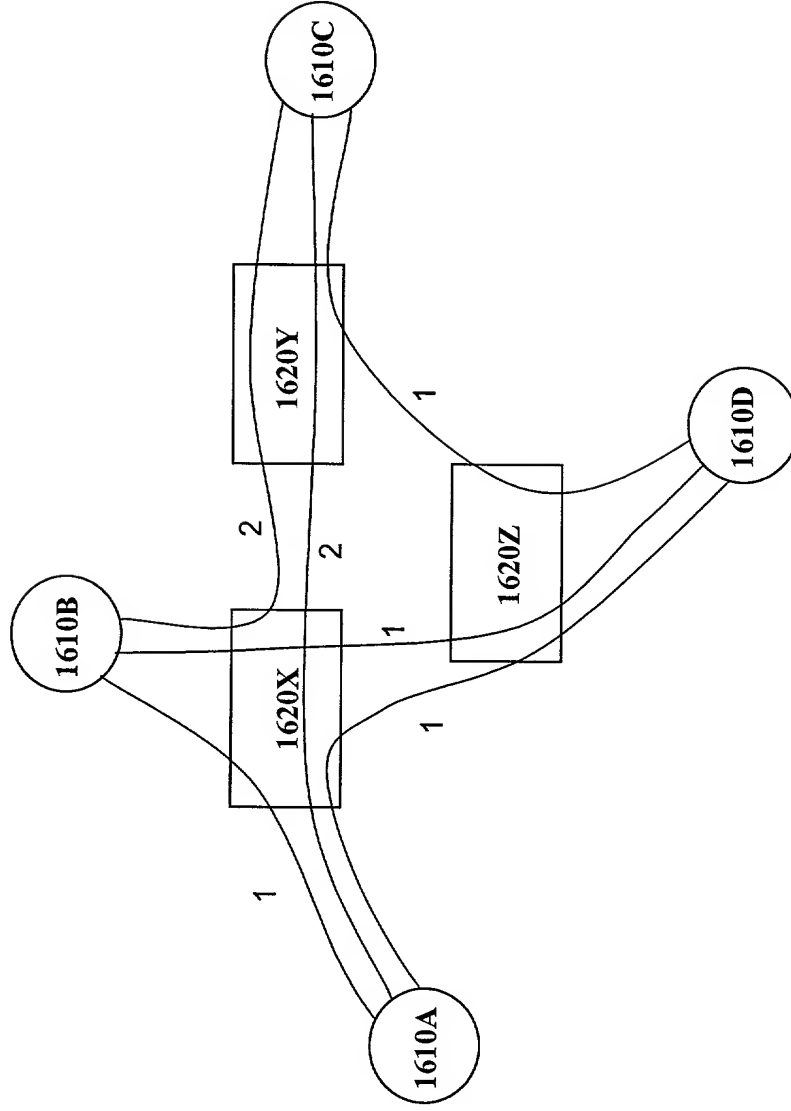


FIG. 17

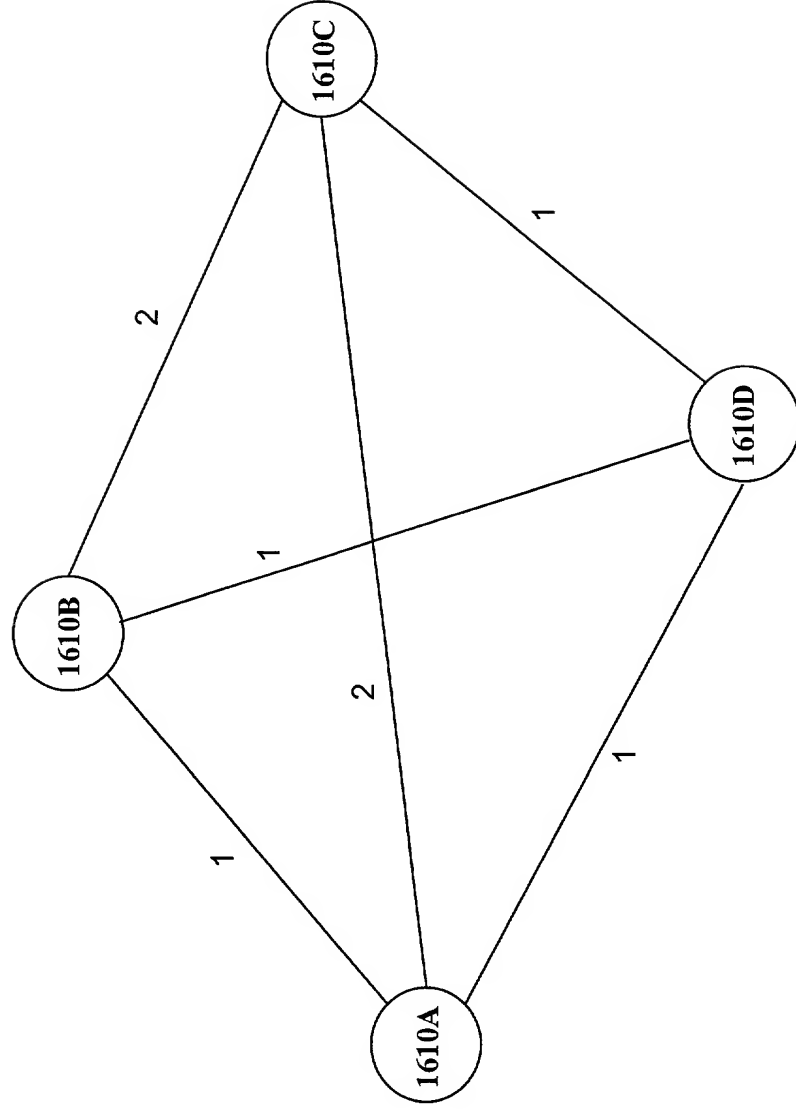


FIG. 18

Edge Node A

Sink	Route-set	Rank	Status
B	AB}	1	Primary
	ACB	2	Secondary
	ADB	3	Secondary
C	AC	1	Primary
	ADC	2	Secondary
D	AD	1	Primary
	ACD	2	Secondary
	ABD	2	Secondary

1902

Edge Node A

Link	Free
A-B	0.05
A-C	0.1
A-D	0.5

Edge Node B

Link	Free
B-A	0.2
B-C	0.05
B-D	0.6

1904B

Edge Node C

Link	Free
C-A	0.2
C-B	0.3
C-D	0.1

Edge Node D

Link	Free
D-A	0.1
D-B	0.4
D-C	0.05

1904D

1906

Edge Node A

Sink	#Requests	$\Sigma D_i \cdot C_i$	$\Sigma C_i$	Routing Index
B	17	0.46	0.25	1.84
C	20	0.3	0.2	1.5
D	25	0.24	0.22	1.09

FIG. 19

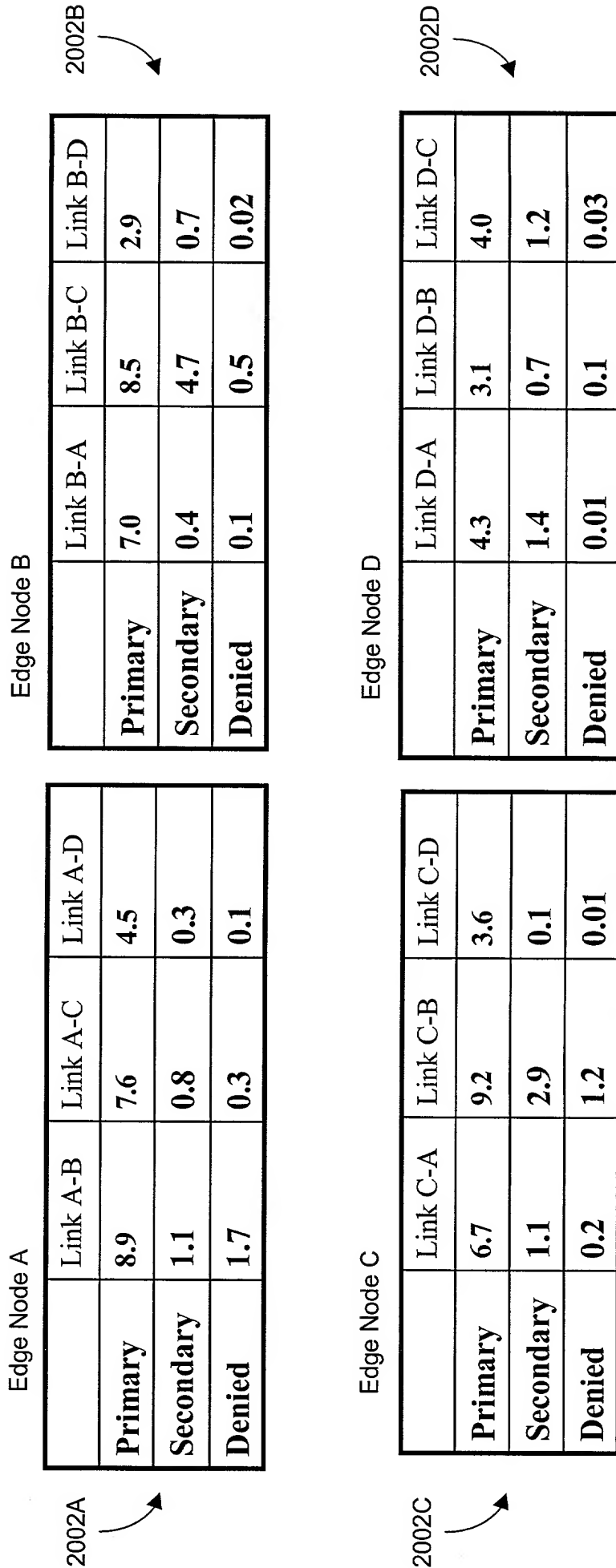


FIG. 20

Edge Node A

Sink	#Requests	$\Sigma Di \cdot Ci$	$\Sigma Ci$	Routing Index
B	18	0.66	0.35	1.89
C	20	0.3	0.2	1.5
D	25	0.24	0.22	1.09

Edge Node A

	Link A-B	Link A-C	Link A-D
Primary	8.9	7.6	4.5
Secondary	1.1	0.9	0.3
Denied	1.8	0.3	0.1

Edge Node C

	Link C-A	Link C-B	Link C-D
Primary	6.7	9.2	3.6
Secondary	1.1	3	0.1
Denied	0.2	1.2	0.01

FIG. 21

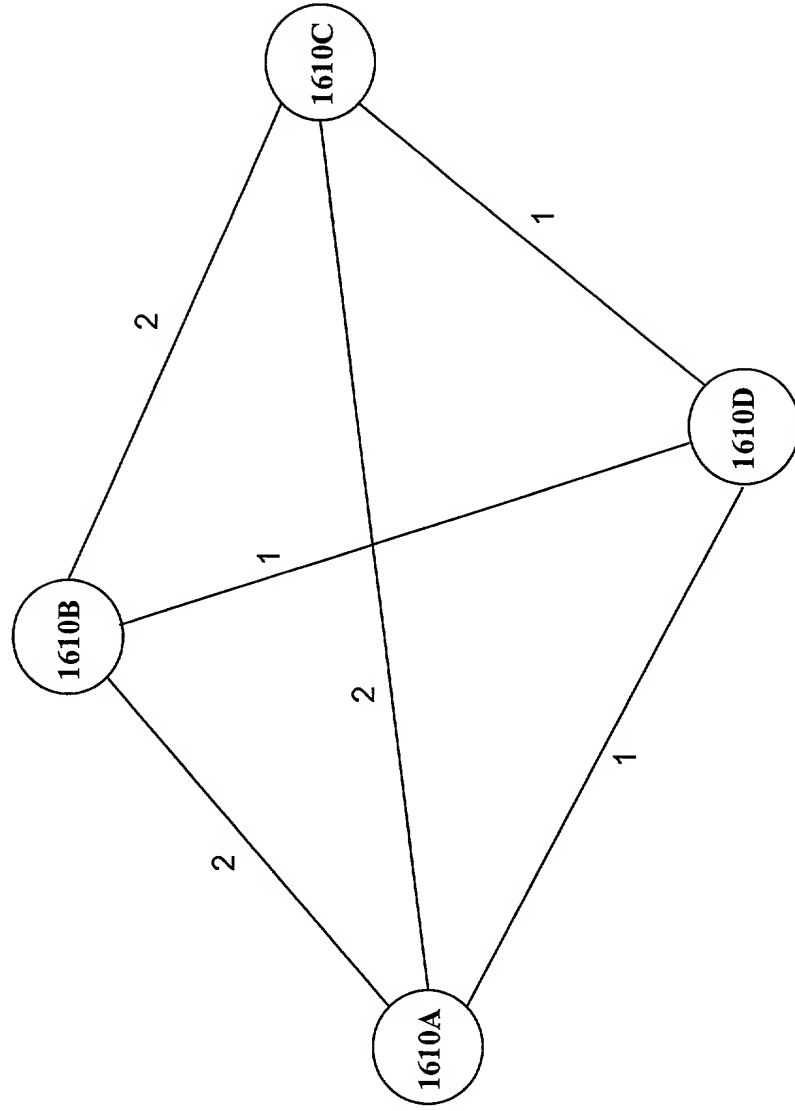


FIG. 22

	Link A-X		Link B-X		Link X-Y	Link X-Z
	A to X	X to A	B to X	X to B	X to Y	X to Z
Primary	21.0	18	18.4	21.2	16.1	7.4
Secondary	2.3	2.9	5.8	4.8	5.6	1
Denied	2.2	0.31	0.62	3.1	0.8	0.11

2302X



	Link C-Y		Link X-Y	Link Y-Z
	C to Y	Y to C	Y to X	Y to Z
Primary	19.5	20.1	6.7	3.6
Secondary	4.2	6.8	1.1	0.1
Denied	1.41	0.83	0.2	0.01

2302Y



	Link D-Z		Link X-Z	Link Y-Z
	D to Z	Z to D	Z to X	Z to Y
Primary	11.4	11	7.4	4
Secondary	3.3	1.1	2.1	1.2
Denied	0.14	0.13	0.11	0.03

2302Z



FIG. 23

2402

Network controller

Overloaded link	Denied traffic
Link B-X	3.1
Link A-X	2.2
Link C-Y	1.41

FIG. 24



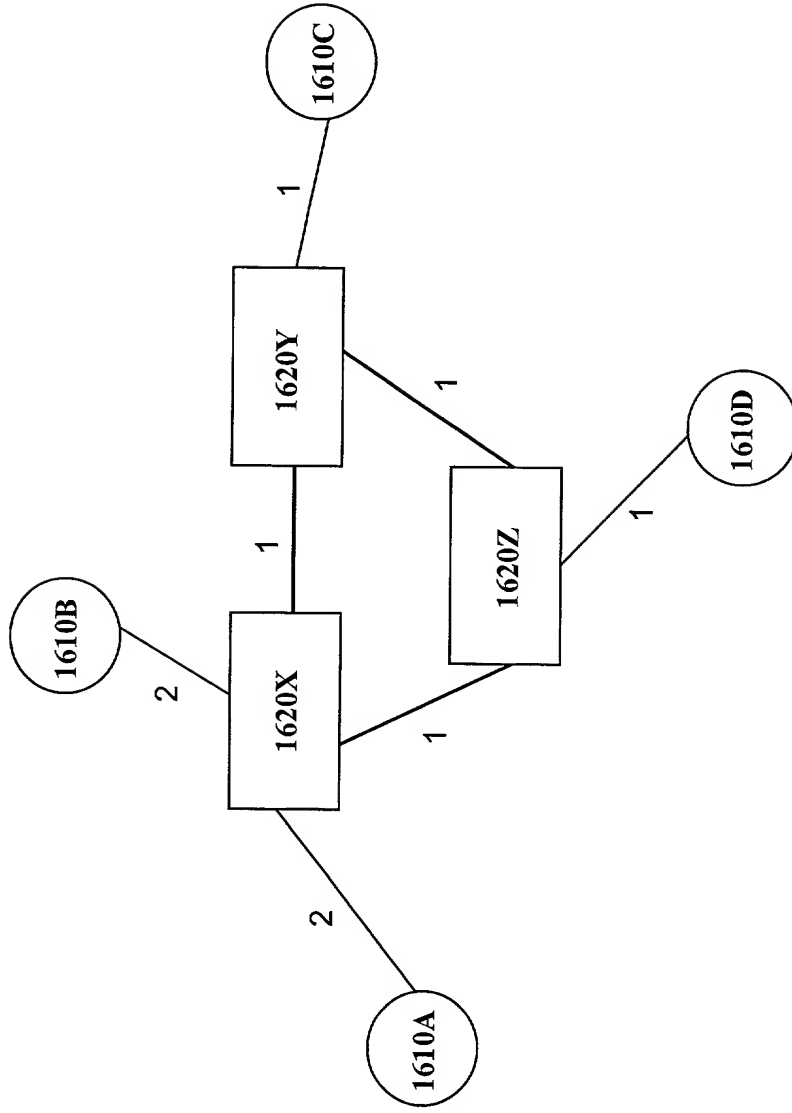


FIG. 25